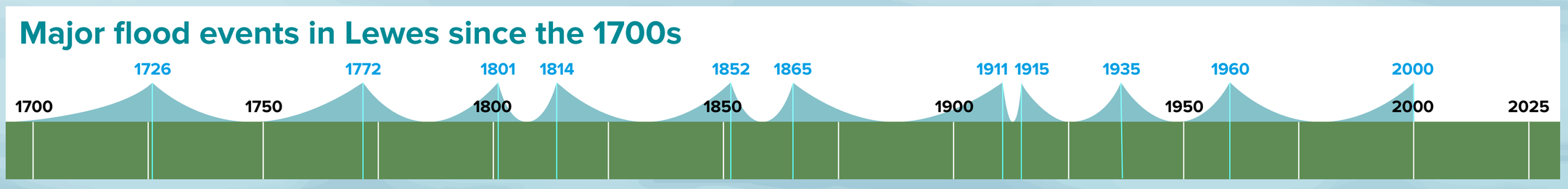
Lewes

The ancient county town of Lewes nestles at the foot of the South Downs as it joins the Weald. It is shaped by the landscape it sits in, with steep streets and wonderful views of the town and South Downs. The River Ouse cuts through the centre on its way out to sea at Newhaven.

The ‘catchment’ of the Ouse stretches from Ditchling in the west, to Ardingly in the north and Uckfield in the east. All rain that falls on this land makes its way into the River Ouse and passes under Cliffe Bridge in central Lewes.

Rain quickly runs off the steep, sloping hillsides. Chalk springs break out at the foot of the Downs. In Lewes these feed the Winterbourne stream and the pond and pool at The Pells.

Throughout history, Lewes has experienced major flooding events



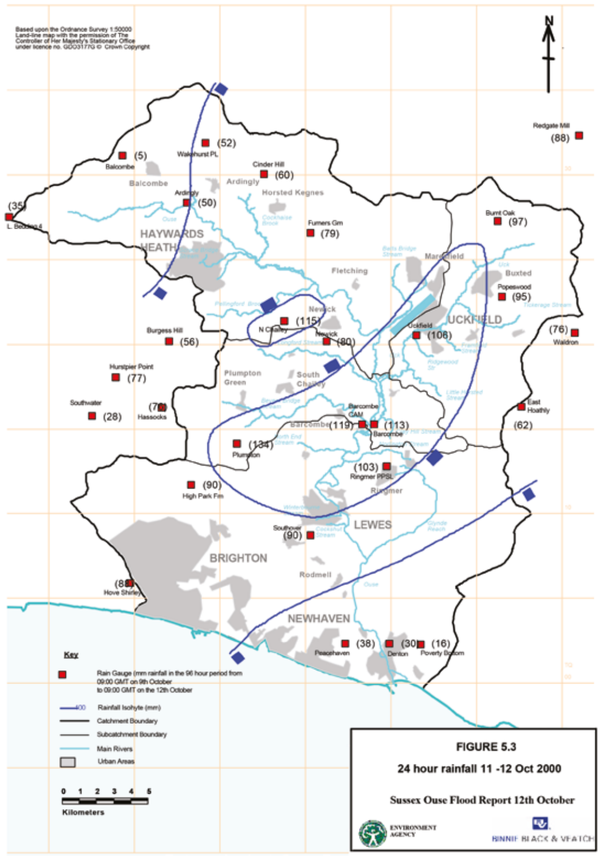
The River Ouse provided a means for work. From riverside docks, Harveys Brewery supplied its world famous beer, and the Phoenix Ironworks shipped high quality ironware. Locks were built to allow over 11 million bricks from Chailey to be shipped upstream to build the Balcombe Viaduct. Lewes was once the largest exporter of lime in Europe, much by barge.

Trade made Lewes wealthy, but its low-lying areas by the river have always been susceptible to floods.

FRIENDS OF LEWES

2000 floods

On 10 & 11 October 2000, exceptionally heavy rain fell on an already saturated Ouse catchment. Plumpton recorded 200mm (8 inches) of rain in 48 hours, causing flooding and major disruption to roads and houses by the Bevan Stream. Uckfield experienced flooding in the early hours of 12 October as water reached the town. A weather emergency was declared for Lewes as floodwater made its way through streams and into the Ouse flowing towards Lewes.

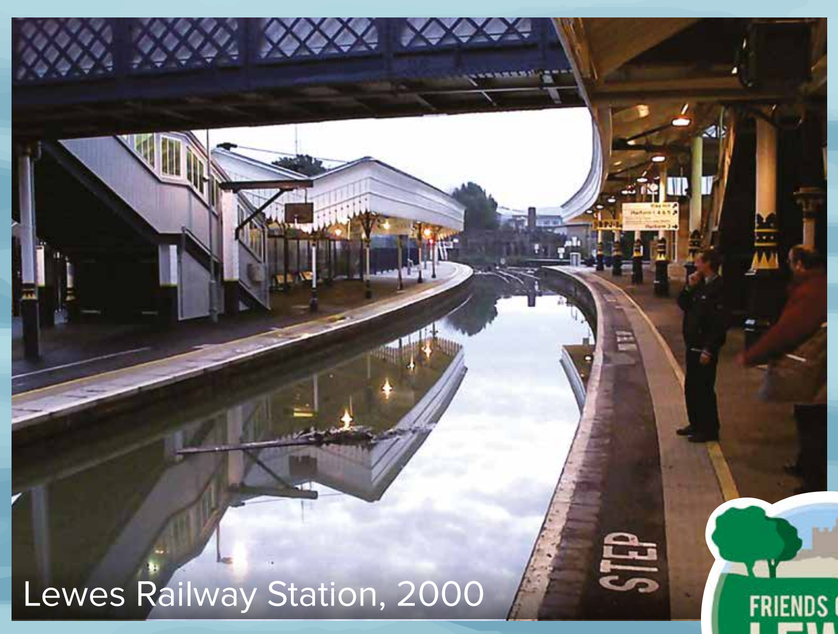


Blue lines show rain in mm for 11 October. More than 1 month's rain was recorded in one day over a large part of the catchment

The first area of Lewes to flood was Bell Lane. Overwhelmed drains poured down roads and pavements into Winterbourne stream. By 07:00 on 12 October, Bell Lane was impassable and the recreation park flooded to a depth of 3 feet. St Pancras Stores and The Course began to flood, shortly followed by Grange Gardens and houses in Tanners Brook. By 08:00 the railway line was closed with water reaching up to the station platforms.

Cliffe bridge

Bell Lane



Lewes Railway Station, 2000

FRIENDS OF LEWES

2000 floods

By the morning of 12 October the Ouse had swelled with water spilling out onto the floodplain. The high tide from Newhaven made its way upriver and combined with the flows coming down. At 13:45 the river burst its banks in central Lewes, flooding 612 homes and over 300 businesses. 186 people spent the night on camp beds in the Town Hall and Malling Community Centre.

Lewes has two large industrial estates. Chemicals like paint thinners and heating oils, safely stored on land, polluted the flood waters after drums washed away. The Environment Agency recovered 90,000 litres of oils.

Lewes Fire Station flooded and the Fire Brigade lost their County Control Centre, which had to be relocated to Eastbourne. Roads were impassable and electricity and gas supplies were cut off for many days. The sewer system and drains were overwhelmed and the flood water became polluted with sewage.

The emergency response lasted many days, followed by a huge recovery effort to rebuild infrastructure and repair businesses and homes. Many people volunteered to help clean up the devastation. Lewes District Council provided 500 skips for ruined household furniture, carpets and other items. Many more were needed by builders and businesses.

The total cost of flood damage was £118 million - over £220 million at 2025 prices. Half of the flooded businesses did not reopen.

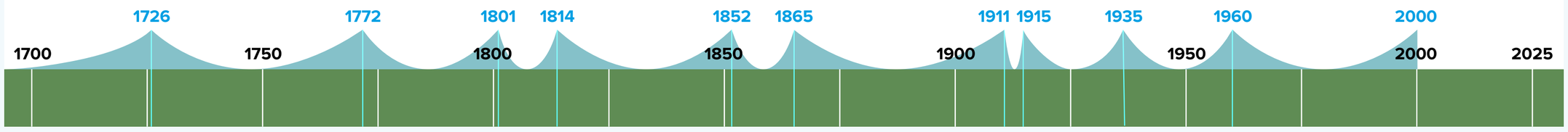
Janak and Chaula Patel, St Pancras Stores

FRIENDS OF LEWES

History of flooding in Lewes

Major floods have occurred in 2000, 1960, 1935, 1911, and every 30 to 40 years back until records began in the 17th Century.

Major flood events in Lewes since the 1700s



1909

Lads 1909

1911

Uckfield railway line 1911

After each flood, river walls have been rebuilt and embankments raised, but defences do not completely remove the chance of flooding. Low-lying areas will flood again if river levels become high enough to overtop the defences.

Malling Street 1960

1960

Cliffe High Street 1960

RNLI rescuing people in 2000

2000

FRIENDS OF LEWES

Climate change

Climate change is increasing global temperatures. Hotter air holds more water leading to more rainfall, and to higher river flows and levels. Sea levels at Newhaven are also rising, raising the height of the tidal River Ouse as it flows through Lewes.

Mediterranean homes are built to cope with extreme temperatures, but how will we adapt our town and homes, especially Lewes' historic buildings?

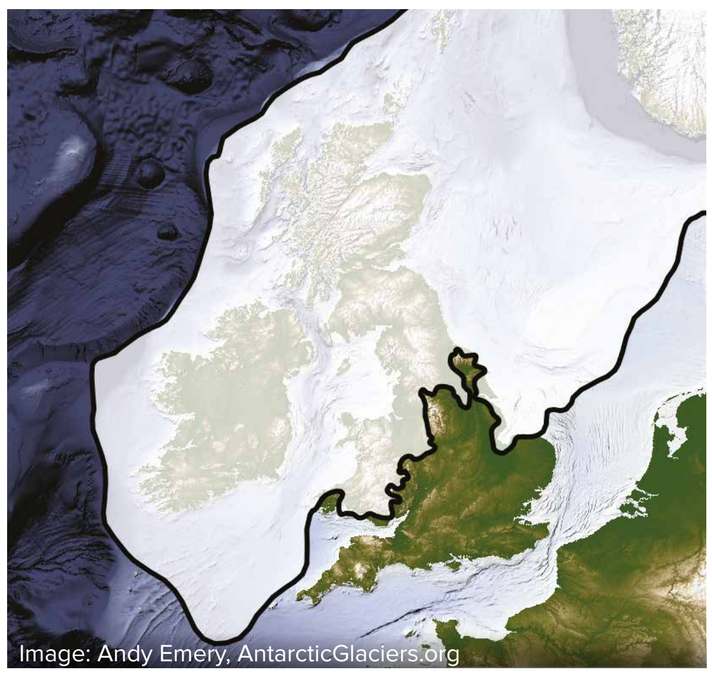


Image: Andy Emery, AntarcticGlaciers.org

Did you know the South East of England is also sinking by 1.5mm a year? This is a result of 'isostatic rebound' after the last ice age when ice sheets 1.5km thick covered much of Northern England and Scotland, pressing them down, whilst raising the South East. When the ice melted Scotland rebounded up, whilst the south started sinking back down to the pre ice age level.

Hotter summers will bring less rain in some years with more droughts. Record-breaking temperatures will become more frequent, as will flash floods from summer storms.

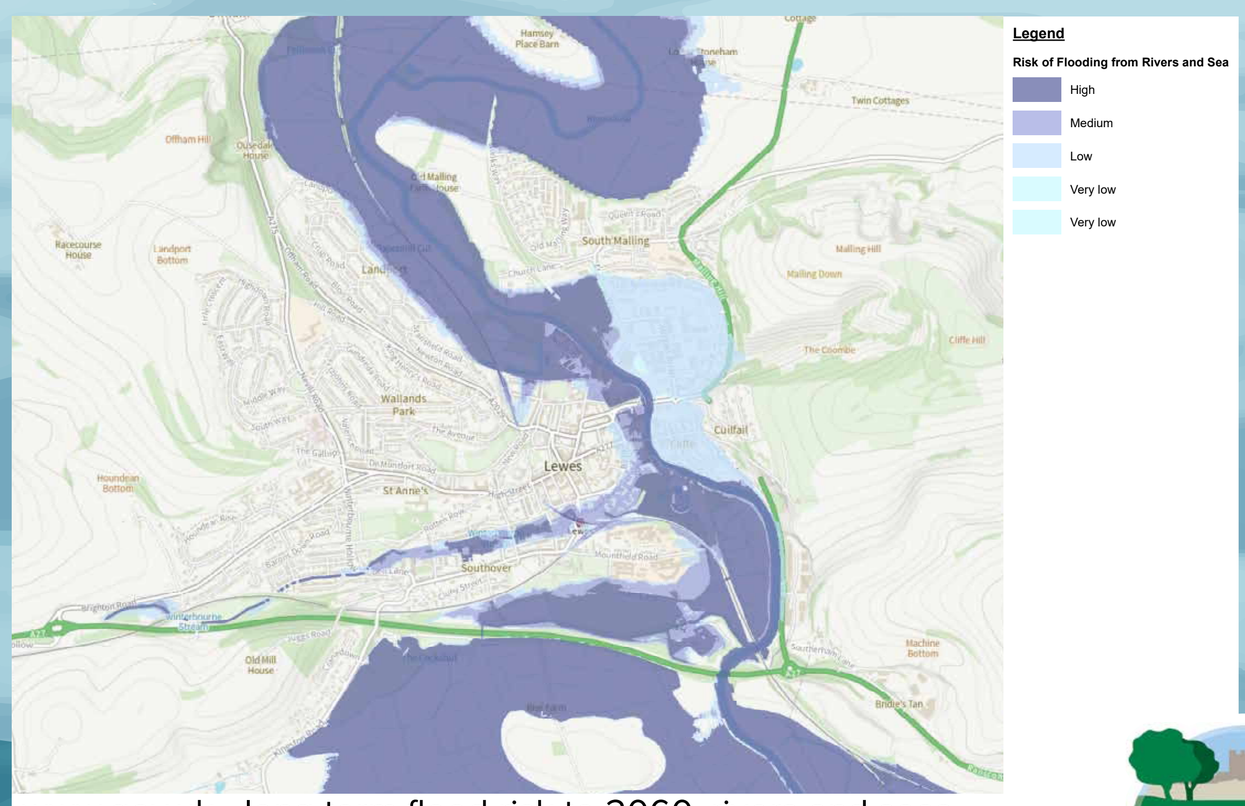
All these changes mean that Lewes remains at risk of flooding in the future, even when new higher river walls are built.

To protect ourselves we need to become more resilient, and increase our capacity to plan for, respond to, and recover from flooding and coastal damage.

How we react to climate change is up to us, but the decisions we make now will impact us long into the future.

Check if your property is at risk of flooding with this QR code

Register for flood warnings and get information on preparing a Flood Plan with this QR code

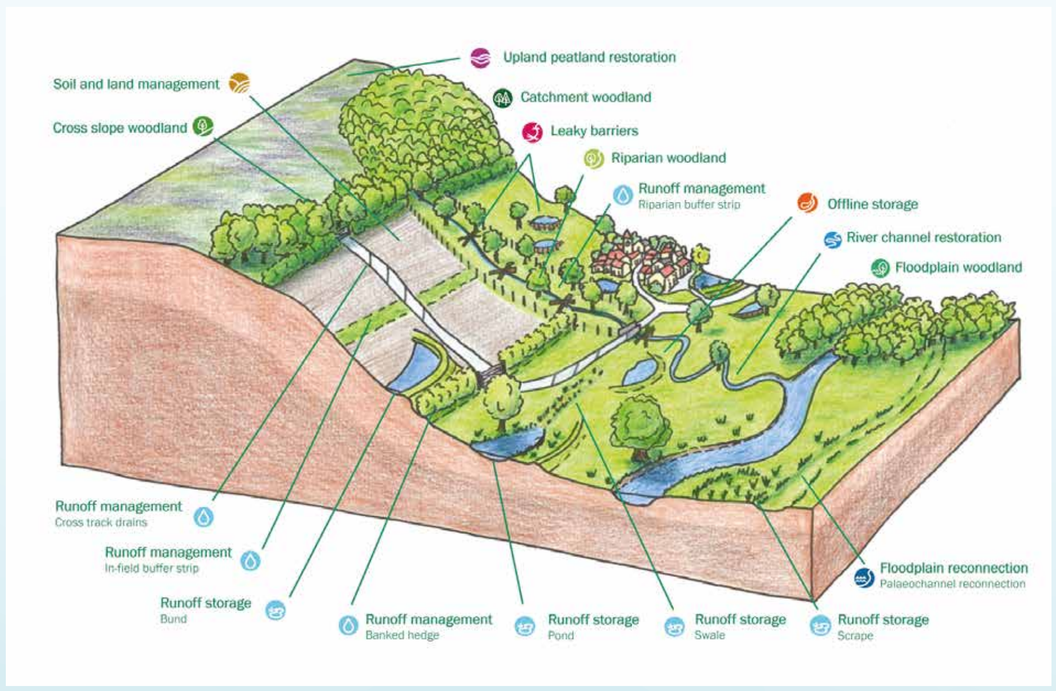


www.gov.uk - long term flood risk to 2060, rivers and seas

FRIENDS OF LEWES

What has been done?

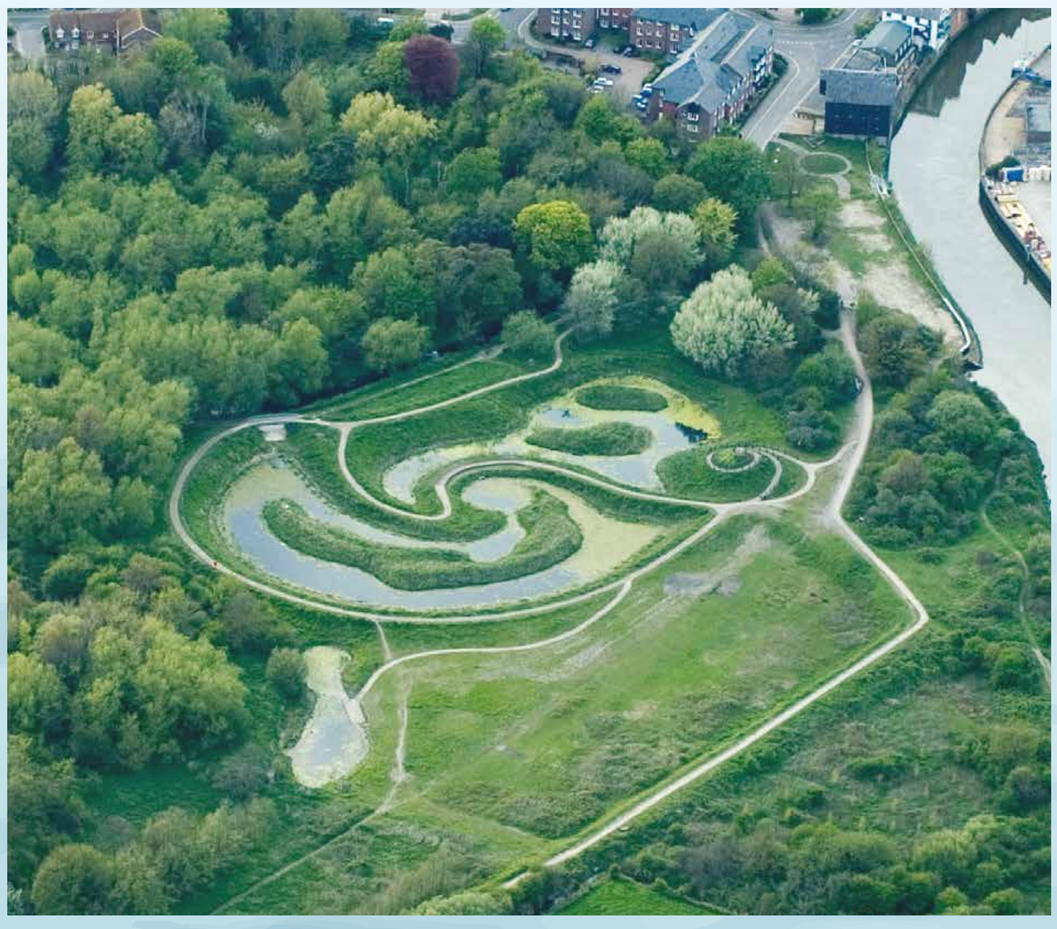
We can do things to help with flooding. Since 2000 the Environment Agency has built new flood embankments at Malling, Tesco, Harveys Way & South Street along with emergency repairs at North Street.



The Ouse and Adur Rivers Trust has worked with landowners upstream of Lewes, promoting changes in land and soil management to help slow river flows.

A new wetland south of Lewes was created to hold water back from the Cockshut stream, which was artificially straightened in 1975 when building the Lewes bypass.

The Railway Land ‘Heart of Reeds’ slows the flow of the overspills from the Winterbourne, providing storage capacity as well as a habitat for wildlife.



New measures were introduced to help homes in the floodplains get affordable insurance, and changes were made to the law to allow insurance companies to ‘build back better’, such as installing solid floors and raising power sockets and cables to come down rather than up.

Friends of Lewes have helped with ‘rain gardens’ to slow flash summer rainfalls.

FRIENDS OF LEWES

Going forward

Authorities

- Must do more to maintain their drains and infrastructure so that they function properly.
- Help communities better prepare and respond through timely and effective forecasting, warning and evacuation.
- Help local communities, business and infrastructure to be more resilient in order to recover quickly.

Businesses and householders

- Should maintain their properties, ensuring waste pipes and roof water pipes are properly connected.
- Check their flood risk, and if at risk, sign up for flood warnings and prepare a flood plan.

Nature-based solutions and natural flood management

- Working with natural processes to protect, restore and emulate the natural functions of catchments, floodplains, rivers and coast.

Climate resilience

- Improving flood and coastal defences.
- Avoiding inappropriate development in the floodplain.
- Use water wisely.
- New ways of thinking to keep up with climate change.

One of ten Alders planted by the Winterbourne stream in 2023.